

09/830810

JC08 Rec'd PCT/PTO 27 APR 2001

SEQUENCE LISTING

<110> Matzuk, Martin  
Pei, Wang

<120> OVARY SPECIFIC GENES AND PROTEINS

<130> P01925W00 / 09807797 / OTA 99-48

<140> PCT/US99/25209

<141> 1999-10-28

<150> 60/106,020

<151> 1998-10-28

<160> 15

<170> PatentIn version 3.0

<210> 1

<211> 1277

<212> DNA

<213> Mus musculus

<400> 1

aaggcgggac aggcgcggga cgcacccatg ttcccgccga gcacgttcca cccctgccc 60

catccttatac cgcaaggccac caaagccggg gatggctgga ggttcggagc caggggctgc 120

cgaccgcgc cccccctcctt cctcccccggc tacagacagc tcatggccgc ggagtacgtc 180

gacagccacc agcgggcaca gctcatggcc ctgctgtcgc ggtatgggtcc ccggtcggc 240

agcagccgtg acgctgcgtt gcaggtgaac ccgcgcgcgc acgcctcggt gcagtgttca 300

ctcgggcgcc gcacgctgca gcctgcaggg tgccgagcca gccccgacgc ccgatcggtt 360

tcctgtcaac cccgtggcca cgcggcgcc gggagatccc cgcgatcctg gcagaccgt 420

gccccgttct cgtccgtgac cttctgtggc ctctcctct cactggaggt tgccggaggc 480

aggcagacac ccacgaaggg agaggggagc ccggcatcct cggggacccg ggaaccggag 540

ccgagagagg tggccgcgag gaaagcggtc ccccagccgc gaagcgagga gggcgatgtt 600

caggctgcag ggcaggccgg gtgggagcag cagccaccac cggaggaccg gaacagtgt 660

gcggcgatgc agtctgagcc tgggagcag gagccatgtc ctgcccaga gatggctcag 720

gaccgggtt attcggatgc ccctcgagac caggcctccc cgcaaagcac ggagcaggac 780

aaggagcgcc tgcgtttcca gttcttagag cagaagtacg gctactatca ctgcaaggac 840

tgcaaaatcc ggtgggagag cgcctatgtg tgggtgtgc agggcaccag taaggtgtta 900

tttcaaacag ttctgcccag tgtgtgagaa atcctacaac ctttacagag tggaggacat 960

25025130.1

cacctgtcaa agttgtaaaaa gaactagatg tgcctgccca gtcagattc gccacgtgga 1020  
ccctaaacgc ccccatcgac aagacttgc tggagatgc aaggacaaac gcctgtcctg 1080  
cgacagcacc tttagcttca aatacatcat tttagtgagag tcgaaaacgt ttctgctaga 1140  
tgggctaat ggaatggaca agttagctt ctccccttcc cacctttcc cttccaaat 1200  
tcttcatgac agacagtgtt acttggatat aaagcctgtg aataaaaggt attgcaaaca 1260  
aaaaaaaaaa aaaaaaaaaa 1277

<210> 2  
<211> 361  
<212> PRT  
<213> Mus musculus

<400> 2

Met Phe Pro Ala Ser Thr Phe His Pro Cys Pro His Pro Tyr Pro Gln  
1 5 10 15  
Ala Thr Lys Ala Gly Asp Gly Trp Arg Phe Gly Ala Arg Gly Cys Arg  
20 25 30  
Pro Ala Pro Pro Ser Phe Leu Pro Gly Tyr Arg Gln Leu Met Ala Ala  
35 40 45  
Glu Tyr Val Asp Ser His Gln Arg Ala Gln Leu Met Ala Leu Leu Ser  
50 55 60  
Arg Met Gly Pro Arg Ser Val Ser Ser Arg Asp Ala Ala Val Gln Val  
65 70 75 80  
Asn Pro Arg Arg Asp Ala Ser Val Gln Cys Ser Leu Gly Arg Arg Thr  
85 90 95  
Leu Gln Pro Ala Gly Cys Arg Ala Ser Pro Asp Ala Arg Ser Gly Ser  
100 105 110  
Cys Gln Pro Arg Gly His Ala Gly Ala Gly Arg Ser Pro Arg Ser Trp  
115 120 125  
Gln Thr Val Ala Pro Phe Ser Ser Val Thr Phe Cys Gly Leu Ser Ser  
130 135 140  
Ser Leu Glu Val Ala Gly Gly Arg Gln Thr Pro Thr Lys Gly Glu Gly  
145 150 155 160  
Ser Pro Ala Ser Ser Gly Thr Arg Glu Pro Glu Pro Arg Glu Val Ala  
165 170 175  
Ala Arg Lys Ala Val Pro Gln Pro Arg Ser Glu Glu Gly Asp Val Gln  
180 185 190  
Ala Ala Gly Gln Ala Gly Trp Glu Gln Gln Pro Pro Pro Glu Asp Arg

25025130.1

195

200

205

Asn Ser Val Ala Ala Met Gln Ser Glu Pro Gly Ser Glu Glu Pro Cys  
 210 215 220

Pro Ala Ala Glu Met Ala Gln Asp Pro Gly Asp Ser Asp Ala Pro Arg  
 225 230 235 240

Asp Gln Ala Ser Pro Gln Ser Thr Glu Gln Asp Lys Glu Arg Leu Arg  
 245 250 255

Phe Gln Phe Leu Glu Gln Lys Tyr Gly Tyr Tyr His Cys Lys Asp Cys  
 260 265 270

Lys Ile Arg Trp Glu Ser Ala Tyr Val Trp Cys Val Gln Gly Thr Ser  
 275 280 285

Lys Val Tyr Phe Lys Gln Phe Cys Arg Val Cys Glu Lys Ser Tyr Asn  
 290 295 300

Pro Tyr Arg Val Glu Asp Ile Thr Cys Gln Ser Cys Lys Arg Thr Arg  
 305 310 315 320

Cys Ala Cys Pro Val Arg Phe Arg His Val Asp Pro Lys Arg Pro His  
 325 330 335

Arg Gln Asp Leu Cys Gly Arg Cys Lys Asp Lys Arg Leu Ser Cys Asp  
 340 345 350

Ser Thr Phe Ser Phe Lys Tyr Ile Ile  
 355 360

<210> 3

<211> 1817

<212> DNA

<213> Mus musculus

<400> 3

gtcacagctt tccctgccc gaatatggtg atctgtctcc attgtccaga tcaggatgat	60
tcttagaaag aagtacacaga ggaatgctat tccccaccca ccctccagaa cctggcaatt	120
cagagtctac tgagggatga ggccttggcc atttctgctc tcacggacct gccccagagt	180
ctgttccag taattttga ggaggccttc actgatggat atataggat cttgaaggcc	240
atgatacctg tgtggccctt cccatacctt tcttagaa agcagataaa taattgcaac	300
ctggagactt tgaaggctat gcttgggaa ctagatatac tgcttgacaca aaaggttcaa	360
accagtaggt gcaaactcag agtaattaaat tggagagaag atgacttgaa gatatggct	420
ggatcccatg aaggtgaagg cttaccagat ttcaggacag agaagcagcc aattgagaac	480
agtgctggct gtgaggtgaa gaaagaattg aaggtgacga ctgaagtccct tcgcattgaag	540
ggcagacttg atgaatctac cacatacttg ttgcagtggg cccagcagag aaaagattct	600

25025130.1

0  
0  
0  
0  
0  
0  
0  
0  
0  
0  
0  
0  
0

attcatctat tctgttagaaa gctactaatt gaaggcttaa ccaaagcctc agtgatagaa	660
atcttcaaaa ctgtacacgc agactgtata caggagctta tcctaagatg tatctgcata	720
gaagagttgg cttttcttaa tccctacctg aaactgatga aaagtcttt cacactcaca	780
ctagatcaca tcataaggtac cttcagttt ggtgattctg aaaagcttga tgaggagaca	840
atattcagct tgatttctca acttcccaca ctccactgtc tccagaaaact ctatgtaaat	900
gatgtccctt ttataaaaagg caacctgaaa gaataaccta ggtgcctgaa aaagcccttg	960
gagacacttt gcatcagtaa ctgtgacctc tcacagtcag acttggatttgc cctgccctat	1020
tgccctgaata tttgtgaact caaacatctg catattagtg atatatatattt atgtgattta	1080
ctccttgagc ctcttggttt ttccttgag agagttggag ataccctgaa aaccctggaa	1140
ttggattcat gttgtatagt ggactttcag ttcagtgcct tgctgcctgc cctaagccaa	1200
tgttctcacc tcagagaggt cactttctat gataatgtatg tttctctgcc tttcttgaaa	1260
acaacttcta caccacacag ccctgctgag tcagctgatc tatgagtgtt accctgcccc	1320
tcttagagtgc tatgatgaca gtgggtgaaat actaacacac agattagaaaa gtttttgtcc	1380
ttagcttctg gatatactga gagccaaaag acagctccat agtgcctcct ttcaaacaac	1440
caaattgctct aaatgtggtg ggtgctacat ttatgatcg catacccaat gttggcgttt	1500
tgtggaacta ctataagctt gattgtgaaa ctgagaaata gaaacttagt attggggact	1560
gatgaaatcc taagtgaatg tccactgtca aatggagcat gaaaatgtca atcacctaaa	1620
agtctgagat acacaggaaa gtcaataact tcctctgagc tggtaatgg atgtgcac	1680
tgtagaaagt atcaagcact tgttagttga atgtgttaca atagaagcac cattttatga	1740
gactggccca atctgttgac tgcataacaat aaatctgttg acttattaaa tttttaaaaa	1800
aaaaaaaaaaaaaaa aaa	1817

<210> 4  
<211> 426  
<212> PRT  
<213> Mus musculus

<400> 4

Met Val Ile Cys Leu His Cys Pro Asp Gln Asp Asp Ser Leu Glu Glu  
1 5 10 15

Val Thr Glu Glu Cys Tyr Ser Pro Pro Thr Leu Gln Asn Leu Ala Ile  
20 25 30

25025130.1

Gln Ser Leu Leu Arg Asp Glu Ala Leu Ala Ile Ser Ala Leu Thr Asp  
35 40 45

Leu Pro Gln Ser Leu Phe Pro Val Ile Phe Glu Glu Ala Phe Thr Asp  
50 55 60

Gly Tyr Ile Gly Ile Leu Lys Ala Met Ile Pro Val Trp Pro Phe Pro  
65 70 75 80

Tyr Leu Ser Leu Gly Lys Gln Ile Asn Asn Cys Asn Leu Glu Thr Leu  
85 90 95

Lys Ala Met Leu Glu Gly Leu Asp Ile Leu Leu Ala Gln Lys Val Gln  
100 105 110

Thr Ser Arg Cys Lys Leu Arg Val Ile Asn Trp Arg Glu Asp Asp Leu  
115 120 125

Lys Ile Trp Ala Gly Ser His Glu Gly Glu Gly Leu Pro Asp Phe Arg  
130 135 140

Thr Glu Lys Gln Pro Ile Glu Asn Ser Ala Gly Cys Glu Val Lys Lys  
145 150 155 160

Glu Leu Lys Val Thr Thr Glu Val Leu Arg Met Lys Gly Arg Leu Asp  
165 170 175

Glu Ser Thr Thr Tyr Leu Leu Gln Trp Ala Gln Gln Arg Lys Asp Ser  
180 185 190

Ile His Leu Phe Cys Arg Lys Leu Leu Ile Glu Gly Leu Thr Lys Ala  
195 200 205

Ser Val Ile Glu Ile Phe Lys Thr Val His Ala Asp Cys Ile Gln Glu  
210 215 220

Leu Ile Leu Arg Cys Ile Cys Ile Glu Glu Leu Ala Phe Leu Asn Pro  
225 230 235 240

Tyr Leu Lys Leu Met Lys Ser Leu Phe Thr Leu Thr Leu Asp His Ile  
245 250 255

Ile Gly Thr Phe Ser Leu Gly Asp Ser Glu Lys Leu Asp Glu Glu Thr  
260 265 270

Ile Phe Ser Leu Ile Ser Gln Leu Pro Thr Leu His Cys Leu Gln Lys  
275 280 285

Leu Tyr Val Asn Asp Val Pro Phe Ile Lys Gly Asn Leu Lys Glu Tyr  
290 295 300

Leu Arg Cys Leu Lys Lys Pro Leu Glu Thr Leu Cys Ile Ser Asn Cys  
305 310 315 320

Asp Leu Ser Gln Ser Asp Leu Asp Cys Leu Pro Tyr Cys Leu Asn Ile  
325 330 335

25025130.1

Cys Glu Leu Lys His Leu His Ile Ser Asp Ile Tyr Leu Cys Asp Leu  
340 345 350

Leu Leu Glu Pro Leu Gly Phe Leu Leu Glu Arg Val Gly Asp Thr Leu  
355 360 365

Lys Thr Leu Glu Leu Asp Ser Cys Cys Ile Val Asp Phe Gln Phe Ser  
370 375 380

Ala Leu Leu Pro Ala Leu Ser Gln Cys Ser His Leu Arg Glu Val Thr  
385 390 395 400

Phe Tyr Asp Asn Asp Val Ser Leu Pro Phe Leu Lys Thr Thr Ser Thr  
405 410 415

Pro His Ser Pro Ala Glu Ser Ala Asp Leu  
420 425

<210> 5

<211> 1018

<212> DNA

<213> Mus musculus

<400> 5

ggccatattga ggacctgcag tagaggtgga acccatgact ggcagcgcaa acacagtgtat 60

aacagctgag ctccaagcaa ggaccaggaa cttgcctca ccacagacat aatctttccc 120

cacaacacct ccaccaagcc gccctgtaaa tcgacatgag tcgccccacgc accaggcgcg 180

tgaccgaaac cacagcaaaa aacatgctct gggtagtga actcaatcag gaaaaggcaga 240

cttgcacctt tagaggccaa ggcgagaaga aggacagctg taaactcttgc ttcagcacgaa 300

tctgcctggg ggagaaagcc aaagaggagg tgaaccgtgt ggaagtctc tcccaggaag 360

gcagaaaacc accaatcact attgctacgc tgaaggcata agtcctgccc atggtcactg 420

tgtcaggtat agagcttct cttccagtaa ctttcggct caggactggc tcaggacctg 480

tgttcctcag tggcctggaa tgttatgaga cttcggacct gacctggaa gatgacgagg 540

aagaggaggaa agaggaggag gaagaggatg aagatgagga tgcagatata tcgctagagg 600

agataacctgt caaacaagtc aaaagggtgg ctccccagaa gcagatgagc atagcaaaga 660

aaaagaaggt ggaaaaagaa gaggatgaaa cagtagtgag gcccagccct caggacaaga 720

gtccctggaa gaaggaggaaa tctacaccca gagcaaagaa gccagtgacc aagaaatgac 780

ctcatcttag catcttctgc gtccaaggca ggttgtccag cagctgtgtt ttgggtcagg 840

tgtccagccc caccacccata gtctgaatgt aataagggtgg tgtggctgtta accctgtAAC 900

ccagccctcc agtttccgga ggtttttgggt gaagagcccc cagcaagttc gccttagggcc 960

acaataaaat ttgcataatc aggaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa 1018

25025130.1

<210> 6  
<211> 207  
<212> PRT  
<213> Mus musculus

<400> 6

Met Ser Arg His Ser Thr Ser Ser Val Thr Glu Thr Thr Ala Lys Asn  
1 5 10 15

Met Leu Trp Gly Ser Glu Leu Asn Gln Glu Lys Gln Thr Cys Thr Phe  
20 25 30

Arg Gly Gln Gly Glu Lys Lys Asp Ser Cys Lys Leu Leu Leu Ser Thr  
35 40 45

Ile Cys Leu Gly Glu Lys Ala Lys Glu Glu Val Asn Arg Val Glu Val  
50 55 60

Leu Ser Gln Glu Gly Arg Lys Pro Pro Ile Thr Ile Ala Thr Leu Lys  
65 70 75 80

Ala Ser Val Leu Pro Met Val Thr Val Ser Gly Ile Glu Leu Ser Pro  
85 90 95

Pro Val Thr Phe Arg Leu Arg Thr Gly Ser Gly Pro Val Phe Leu Ser  
100 105 110

Gly Leu Glu Cys Tyr Glu Thr Ser Asp Leu Thr Trp Glu Asp Asp Glu  
115 120 125

Glu Glu Glu Glu Glu Glu Glu Asp Glu Asp Glu Asp Ala Asp  
130 135 140

Ile Ser Leu Glu Glu Ile Pro Val Lys Gln Val Lys Arg Val Ala Pro  
145 150 155 160

Gln Lys Gln Met Ser Ile Ala Lys Lys Lys Val Glu Lys Glu Glu  
165 170 175

Asp Glu Thr Val Val Arg Pro Ser Pro Gln Asp Lys Ser Pro Trp Lys  
180 185 190

Lys Glu Lys Ser Thr Pro Arg Ala Lys Lys Pro Val Thr Lys Lys  
195 200 205

<210> 7  
<211> 214  
<212> DNA  
<213> Mus musculus

<400> 7

acagcagagg ttagtgcctcag aaatcaagtt ttaacagagg gccaggtgct tcttagatgt 60

gaggggatttg cacacctccc cacccctcc tctttccctag gcttcttaac agcctgctgt 120

25025130.1

ggaaagctga cccttagatg gagccctgaa gccatattga ggacctgcag tagaggtgga 180  
acccatgact ggcagcgcag taagtttag cagg 214

<210> 8  
<211> 194  
<212> DNA  
<213> Mus musculus

<400> 8  
cttgcatta ctcagaacac agtgataaca gctgagctcc aagcaaggac ccaggacctt 60  
gcctcaccac agacataatc tttccccaca acacctccac caagccgccca tgtaaatcga 120  
catgagtcgc cacagcacca gcagcgtgac cgaaaccaca gcaaaaaaca tgctctgggg 180  
taagggctaa ggct 194

<210> 9  
<211> 116  
<212> DNA  
<213> Mus musculus

<400> 9  
gtcttcgctg tgcaggtgt gaactcaatc aggaaaagca gacttgcacc tttagaggcc 60  
aatgcgagaa gaaggacagc tgtaaactct tgctcagcac ggtgggtgtc tcccaa 116

<210> 10  
<211> 144  
<212> DNA  
<213> Mus musculus

<400> 10  
catcacctt ctcagatctg cctggggag aaagccaaag aggaggtgaa ccgtgtggaa 60  
gtcctctccc aggaaggcag aaaaccacca atcactattt ctacgctgaa ggcatcagtc 120  
ctgccccatgg tgagtcttct ctcc 144

<210> 11  
<211> 124  
<212> DNA  
<213> Mus musculus

<400> 11  
agaaggggga cacaggtcac tgtgtcaggt atagagcttt ctcctccagt aacttttcgg 60  
ctcaggactg gctcaggacc tgtgttcctc agtggcctgg aatgttatgg taagttgttag 120  
ccta 124

25025130.1

<210> 12  
<211> 182  
<212> DNA  
<213> Mus musculus

<400> 12  
ggctaccat tccagagact tcggacctga cctggaaaga tgacgaggaa gaggaggaag 60  
aggaggagga agaggatgaa gatgaggatg cagatatatc gctagaggag atacctgtca 120  
aacaagtcaa aagggtggct ccccagaagc agatgagcat agcaaaggta gggggaaaag 180  
aa 182

<210> 13  
<211> 71  
<212> DNA  
<213> Mus musculus

<400> 13  
tggtttttgt tccagaaaaa gaaggtggaa aaagaagagg atgaaacagt agtgaggtaa 60  
ttcatgcagt t 71

<210> 14  
<211> 64  
<212> DNA  
<213> Mus musculus

<400> 14  
ctattccctt tccaggccca gccctcagga caagagtccc tggagaagg tgagcaataa 60  
gaag 64

<210> 15  
<211> 364  
<212> DNA  
<213> Mus musculus

<400> 15  
ctcttatctg cacaggagaa atctacaccc agagcaaaga agccagtgac caagaaatga 60  
cctcatctta gcatcttctg cgtccaaggc aggatgtcca gcagctgtgt tctggtgcag 120  
gtgtccagcc ccaccaccct agtctgaatg taataaggta gtgtggctgt aaccctgtaa 180  
cccagccctc cagttccgg aggttttgg tgaagagccc ccagcaagtt cgccctaggc 240  
cacaataaaa tttgcatgat caggacctcc ctctgcctcc ccctccctgg atgggtctcc 300  
tcgctgctgc gatagctcat gtgccagca gagggcaacc acgagcaaga aaccagcccc  
atgt 364

25025130.1